<u>**REMARKS**</u>

Upon entry of the present paper, Claims 1 to 70 will be pending for further examination.

Claim 63 has been cancelled.

Claim 1 has been amended to include the limitation that the method is for "processing a signal (y(t)) sent over a <u>noiseless</u> wireless communication channel". Claims 28, 34, 61, 62, 64, 65 and 66 have been amended in a similar manner. Claims 1, 28, 34, 61, 62, 64, 65 and 66 have each been amended so that they are limited to noiseless cases i.e. "...processing a signal (y(t)) sent over a <u>noiseless</u> wireless communication channel".

New claims 67 -70 have been added to the claim set. New claims 67 -69 cover methods for processing a signal which is sent over any wireless communication channel (i.e. processing a signal which is sent over a noiseless or a noisy communication channel). Claim 70 relates to a method of channel estimation.

Reconsideration of the present application in view of the amended claim set, the Remarks filed in response to the previously issued Office Action and the Remarks outlined herein, is respectfully requested.

I.   <u>Claims are supported by credible asserted utility or well established utility (35 USC §101)</u>

The Examiner has stated in the Office Action that the step of perfectly reconstruction is only possible when the channel parameters can be perfectly estimated and that perfect estimation of the parameters of a channel can only be done for a noiseless channel. According to the Examiner, "a noiseless case does not exist" and that such is an "ideal representation of the invention". On this basis the Examiner maintains that the claimed invention is not are supported by credible asserted utility or well established utility

The applicants respectfully disagree with the Examiners objection. It is submitted that noiseless channels do exist and are common in the art. For example, emails which are sent are rarely received with errors. In the context of the present invention, if for example a music file was sent via email, it can be expected that the music file will be received without any errors; in this case the email channel is a noiseless channel. The music file sent in the email could be reconstructed perfectly using the method of the present invention.

Thus, it is submitted therefore that noiseless cases (noiseless communication channels) do exist, and they are not simply an "ideal". The present invention can be used with such noiseless communication channels to perfectly reconstruct a signal.

It is the application of the present invention in noiseless cases for which patent protect is sought. Claims 1, 28, 34, 61, 62, 64, 65 and 66 have each been amended so that they are limited to noiseless cases i.e. "...processing a signal (y(t)) sent over a noiseless wireless communication channel".

New claims 67 -69 cover methods for processing a signal which is sent over any wireless communication channel (i.e. processing a signal which is sent over a noiseless or a noisy communication channel). It is submitted that while perfect reconstruction of a signal sent over a noisy channel may not be possible, the methods of claims 67 -69 still enable more precise reconstruction with less computational requirements compared to other methods (see page 15 lines 12-19, page 18 lines 1-11 and page 18 lines 19-26). This is achieved as the method of claims 67 -69 take into account the "delays ($\tau_k^{(l)}$) ... induced by said communication channel on said sent signal" when reconstructing the signal. Prior art methods do not take into account the delays induced by the communication channel; rather the methods of the prior art only take account of the attenuation of the sent signal induced by the communication channel. Thus, precise reconstruction of the signal cannot be achieved using prior art methods.

    In view of the foregoing, the applicants submit that claims 1-66 are supported by
credible asserted utility or well established utility. Accordingly, the applicants respectfully
request that the rejections be withdrawn.

II.   The claimed invention complies with the enablement requirement (35

USC§112)

The Examiner has stated in the Office Action that the step of perfectly reconstructing a
signal is only possible for noiseless channels. According to the Examiner, noiseless
channels do not exist and therefore the application is not enabling.

As discussed in the section "I" above, the applicants submit that noiseless channels do exist
and are common in the art. For example, emails which are sent are rarely received with
errors. In the context of the present invention, if for example a music file was sent via
email, it can be expected that the music file will be received without any errors; in this case
the email channel is a noiseless channel. The music file sent in the email could be
reconstructed perfectly using the method of the present invention. Thus, it is submitted that
noiseless channels do exist and the present invention can be used with such noiseless
channels to perfectly reconstruct a signal.

Accordingly, it is submitted that the skilled person would have no difficulty in obtaining a
noiseless channel in which they could execute the method of the present invention; thus the
application must be considered enabling.

New claims 67 -69 cover methods for processing a signal which is sent over any wireless
communication channel (i.e. processing a signal which is sent over both noiseless and noisy
channels are covered in these claims). It is submitted that while perfect reconstruction of a
signal sent over a noisy channel may not be possible, the methods of claims 67 -69 still
enable more precise reconstruction with less computational requirements (see page 15 lines
12-19, page 18 lines 1-11 and page 18 lines 19-26). This is achieved as the method of
claims 67 -69 take into account of the "delays ($\tau_k^{(l)}$) ... induced by said communication

channel on said sent signal" when reconstructing the signal. Prior art methods do not take into account the delays induced by the communication channel; rather the methods of the prior art only take account of the attenuation of the sent signal induced by the communication channel. Thus, precise reconstruction of the signal cannot be achieved using prior art methods.

In view of the foregoing, the applicants submit that claims 1-66 are enabling. Accordingly, the applicants respectfully request that the rejections be withdrawn.

III.   Conclusion

In light of the amendments contained herein, the applicants submit that the application is in condition for allowance, for which early action is requested.   Should the Examiner is still of the opinion that the application is not in order for grant, then we would request an interview with the Examiner.   In the event an interview is necessary, the Examiner is requested to contact the undersigned at the telephone number set forth below.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully Submitted,

Dated: March 23, 2011   By: /John Rickenbrode/_____
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